CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION

ORDER NO. 90-061

WATER RECLAMATION REQUIREMENTS FOR:

BUENA VISTA WINERY SONOMA, SONOMA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, hereinafter the Board, finds that:

- Buena Vista Winery, hereinafter the Discharger, is located at 27000 Ramal Road, Sonoma, in Sonoma County. The Discharger submitted a Report of Waste Discharge dated March 26, 1990.
- 2. Existing wastewater facilities treat both industrial and sanitary waste. The industrial waste flow is neutralized with ammonia and discharged to three aeration ponds. After a holding time of at least sixty days, the industrial wastewater is discharged to three evaporation ponds from April 15 to October 15 or is used for irrigation purposes.
- 3. Sanitary waste from the Discharger is discharged to a septic tank then to a sanitary waste pond. If the sanitary pond overflows, wastewater would flow to a sump and be chlorinated prior to being discharged to the evaporation ponds.
- 4. The Discharger proposes to expand its production level from 200,000 cases per year to 350,000 cases per year within the next five years (1990-1995). Wastewater generated by the Discharger consists of the following:
 - a. Waste-001 is winery processing wastewater consisting of drainage from floors, exterior wash areas, and crushing pit drains. During the 60-day crushing season (approximately September through October) of each year, the average flow is approximately 36,200 gallons/day (GPD) with a peak flow as high as 55,000 GPD based on a total crush tonnage of 3,400 of grapes over that 60-day period. During the processing season for the rest of the year, waste flow averages approximately 11,200 GPD. The total annual flow is approximately 5.2 million gallons.
 - b. Waste-002 is a sanitary waste generated by 60 winery employees and three winery residences. The total average flow is 1500 GPD, with a peak flow of 2250 GPD, and consists of 750 GPD from the winery employees and 750 GPD from the three residences.

The wastewater is discharged into two septic systems then to a sanitary waste pond adjacent to the existing wastewater evaporation ponds. In the event of an overflow, a static tablet chlorinator and a contact chamber provide one hour disinfection contact time prior to discharge to the evaporation ponds.

- c. Waste-003 consists of up to 408 cubic yards per year of agricultural solid wastes resulting from crushing and wine production that include stems, pomace, and lees. The solid wastes will be disposed of on the 625 acres of vineyard operated by the Discharger by spreading and discing into the soil.
- 5. Industrial wastewater consisting of winery processing waste (Waste-001) is collected in separate gravity sewer lines and neutralized prior to being pumped to three (3) oxidation ponds for biological stabilization. Most of the industrial wastewater is discharged to pond C which has a capacity of 2.1 million gallons. Two surface aerators maintain acceptable dissolved oxygen levels in the pond. Ponds A and B are downhill of Pond C in case Pond C overflows. Excessive capacity in Pond A is usually transferred to the evaporation ponds via piping.
- 6. The capacity of Pond A is 1.39 million gallons and has two surface aerators which operate a few hours each day. Pond B has a capacity of 0.9 million gallons and has one surface aerator which operates a few hours each day. Total storage volume of the pond system is approximately 4.4 million gallons which is sufficient to contain all projected winery wastes during wet weather during wet weather, plus excess seasonal precipitation up to a 10-year recurrence interval with a minimum of two feet of freeboard.
- 7. Treated effluent from the oxidation ponds is disposed of by the existing three evaporation ponds (a total surface area of 1.67 acres) during dry weather or is to be used for drip irrigation of approximately 80 acres of vineyard partially on adjoining property that is managed and operated by the Discharger. The maximum irrigation rate is approximately 0.27 inches per week at the vine. Attachment A is a location map showing the treatment, evaporation, and proposed vineyard disposal area and is hereby made a part of this Order.
- 8. Waste Discharge Requirements for the current discharge were adopted on September 18, 1985 in this Board's Order No. 85-098.

- 9. The Board adopted a Water Quality Control Plan for the San Francisco Bay Basin in December 1986. For reclaimed water, the Basin Plan requires treatment sufficient to achieve quality limits prescribed by the Department of Health Services. These are presently set forth in Title 22, Sections 60301-60357 of the California Administrative Code. The requirements of this Order are in conformance with these limits.
- 10. The beneficial uses contained in the Basin Plan for the lower Sonoma Creek and San Pablo Bay are:
 - a. Industrial service supply
 - b. Navigation
 - c. Water Contact recreation
 - d. Non-contact water recreation
 - e. Warm Fresh water habitat
 - f. Wildlife habitat
 - q. Preservation of rare and endangered species
 - h. Fish migration and spawning
 - i. Ocean commercial and sport fishing
 - j. Shell fish harvesting
 - k. Estuarine habitat
 - 1. Marine habitat
 - m. Preservation of areas of special biological significance
- 11. The beneficial uses of the Sonoma Valley groundwater basin include municipal water supply, agricultural water supply, industrial process water supply, and industrial service supply.
- 12. The Regional Board has reviewed and considered the information contained in the Negative Declaration and finds that the document reviewed did not identify any anticipated substantial adverse effect on water resources (Title 14, California Administrative Code, section 15064).
- 13. The issuance of Waste Discharge Requirements is exempt from the provisions of chapter 3 (commencing with section 21100) of Division 13 of the Public Resources Code (California Environmental Quality Act) pursuant to section 13389 of the California Water Code.
- 14. The Board, in a public meeting, heard and considered all comments pertaining to the water reuse.

IT IS HEREBY ORDERED, that the producer and user, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, shall comply with the following:

A. Reclaimed Water Quality Specifications

1. Waste at the surface of the aeration/storage ponds shall meet the following water quality limits at all times in any grab sample:

Dissolved Oxygen 2.0 mg/l, Minimum

Dissolved Sulfide 0.1 mg/l, Maximum

pH 6.0, Minimum; 9.0, Maximum

2. The Discharger shall discontinue the diversion of reclaimed water to the vineyards during any period in which the limits specified in A.1 are not being met.

B. Reclaimed Water Use Restrictions

- 1. No reclaimed water shall be applied to the vineyard disposal area in anticipation of or during rainfall, 48 hours after a rainfall or when soils are saturated.
- No reclaimed water used for irrigation shall be allowed to escape to areas outside the irrigation areas, either by surface flow or airborne spray, except for minor quantities occurring as a result of normal irrigation practice.
- 3. Ponding shall not occur in the disposal area in amounts which could cause a mosquito problem.
- 4. Reclaimed water shall not be injected into any fixed irrigation system connected to a domestic water supply.
- 5. Use of reclaimed water on areas not specified on Attachment A of this Order is prohibited without written authorization from the Executive Officer of this Board.
- 6. The public shall be effectively excluded from the waste treatment, storage, and disposal areas.

C. Provisions

- 1. The treatment, distribution or reuse of reclaimed water shall not create a nuisance as defined in Section 13050(m) of the California Water Code.
- 2. The Discharger shall maintain in good working order and operate as efficiently as possible any facility or control system installed to achieve compliance with the water reclamation requirements.

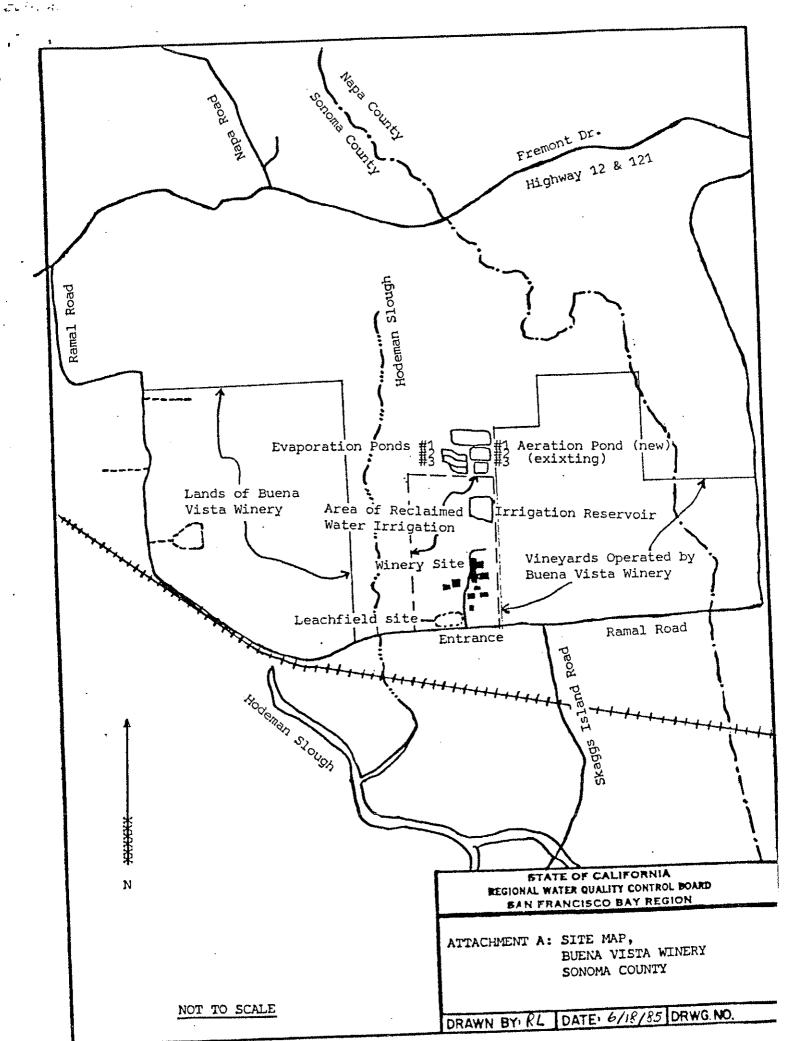
- 3. The sanitary waste pond, aeration ponds and the disposal/evaporation ponds shall be clearly identified with posted notices or warning signs.
- 4. Waste-001 shall not exceed an average daily flow of 40,000 GPD during the crushing season. Waste-003 shall not be discharged into any of the pond systems.
- 5. A minimum freeboard of two feet shall be maintained in the aeration/storage ponds at all times.
- 6. A minimum freeboard of one foot in the evaporation ponds is required between April 15 and September 1 of each year. Between September 1 and October 15 of each year, the water level in the evaporation ponds shall be lower than six inches in depth at all times. No wastewater shall be present in the evaporation area before April 15 and after October 15 of each year.
- 7. The Discharger shall permit the Regional Board or its authorized representatives:
 - a. Entry upon premises in which an effluent source is located or in which any required records are kept.
 - b. Access to copy any records required to be kept under terms and conditions of this Order.
 - c. Inspection of any monitoring equipment or method required by this Order.
 - d. Sampling of any discharge or reclaimed water.
- 8. The aeration/storage ponds shall be adequately protected from erosion, washout and flooding from a rainfall event having a predicted frequency of once in 100 years.
- 9. The Discharger shall file with the Regional Board technical reports of self-monitoring work performed according to detailed specifications as directed by the Executive Officer.
- 10. The requirements prescribed by this Order supersede the requirements prescribed by Order No. 85-098 adopted on September 18, 1985. Order No. 85-098 is hereby rescinded.
- 11. The discharger shall file with the Regional Board a Report of Waste Discharge at least 180 days before making any material change or proposed change in the character, location. or volume of reuse.

I, Steven R. Ritchie, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on May 16, 1990.

STEVEN R. RITCHIE Executive Officer

Map Self-Monitoring Program

Attachments:



CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM FOR

BUENA VISTA WINERY

SONOMA,

SONOMA COUNTY

ORDER NO. 90-061

PART A

I. GENERAL

Reporting responsibilities of waste dischargers are specified in Sections 13225(a), 13267(b), 13268, 13383, and 13387 (b) of the California Water Code and this Regional Board's Resolution No. 73-16.

The principal purposes of a monitoring program by a waste discharger, also referred to as a self-monitoring program, are:

- 1. To document compliance with waste discharge requirements and prohibitions established by the Regional Board.
- 2. To facilitate self-policing by the waste discharger in the prevention and abatement of pollution arising from waste discharge.

II. DESCRIPTION OF SAMPLING STATIONS AND SCHEDULE OF SAMPLING, ANALYSIS AND OBSERVATIONS

A. Pond Influent

At any point in the treatment facilities headworks at which all waste tributary to the system is present:

Monthly, determine average daily flow, in gallons per day, of wastewater entering the aeration pond system and the sanitary waste pond.

B. Aeration/Storage Pond and Sanitary Waste Pond

At any point in each pond within one foot of the water surface and no less than three feet from the bank, representative of the wastewater:

- 1. Monthly, a grab sample to determine dissolved oxygen (D.O.) concentration, in mg/l. If D.O. is less than 2.0 mg/l, sample for dissolved sulfide.
- 2. Monthly, a grab sample to determine pH.
- 3. Weekly, perform standard observations along the perimeter of each pond:
 - a. Evidence of leaching liquid from pond perimeter dike and estimated size of affected area. (Show affected area on a sketch).
 - b. Odor: presence or absence, characterization, source and distance of travel.

- c. Estimated number of waterfowl and other water associated birds in the vicinity of the ponds.
- d. Determine freeboard, in inches, for each pond: from the water surface to the lowest point in pond perimeter dike.

C. Pond Effluent

Daily, determine flows in gallons per day of wastewater transferred from aeration/storage ponds to the evaporation ponds and/or the vineyard drip irrigation area. Additionally, determine flow in gallons per day of wastewater transferred from the waste disposal pond to the evaporation ponds.

D. <u>Evaporation/Disposal Pond Area</u>

Weekly during the disposal period, perform standard observations as described in II.B.3. along the perimeter of each disposal pond.

E. <u>Vineyard Drip Irrigation Area</u>

Daily, during the irrigation period, observe the whole area for the following:

- 1. Evidence of surface runoff escaping from the drip irrigation area and estimated size of affected area. (Show affected area on a sketch).
- 2. Odor: presence or absence, intensity, and distance of travel.
- 3. Existence of Posted notices or warning signs to notify the public or winery employees that the water used for irrigation is reclaimed waste.

F. Leachfield Area

Weekly, during the raining season, determine if any surfacing of wastewater is occurring. If observed, notify the Regional Board by telephone within 48 hours.

III. REPORT TO BE FILED WITH THE REGIONAL BOARD

1. Violation of Requirements:

In the event the discharger is unable to comply with the conditions of the waste discharge requirements and prohibitions due to:

(a) maintenance work, power failures, or breakdown of waste treatment equipment, or

- (b) accidents caused by human error or negligence, or
- (c) other causes such as acts of nature,

the discharger shall notify the Regional Board office by telephone as soon as he or his agents have knowledge of the incident and confirm this notification in writing within two weeks of the telephone notification. The written report shall include pertinent information explaining reasons for the non-compliance and shall indicate what steps were taken to prevent the problem from recurring.

In addition, if the non-compliance caused by items (a), (b), or (c) above is with respect to any of the effluent limits, the waste discharger shall promptly accelerate his monitoring program to analyze the discharge at least once every week for those constituents which have been violated. Such weekly analyses shall continue until such time as the effluent limits have been attained, or until such time as the Executive Officer determines to be appropriate. The results of such monitoring shall be included in the regular Self-Monitoring Reports.

2. Bypass Reports

Bypass reporting shall be an integral part of regular monitoring program reporting and a report on bypassing of untreated waste or bypassing of any ponded water shall be made which will include cause, time and date, duration and estimated volume of waste bypassed, method used in eliminating volume, and persons (including Sonoma County Department of Environmental Health) notified, for planned and/or unplanned bypasses. Notification to the Regional Board shall be made immediately by phone, followed by written correspondence within 15 days if a bypass occurs.

The discharger shall file a written technical report at least 15 days prior to advertising for bid on any construction project which would cause or aggravate the discharge of waste in violation of requirements; said report shall describe the nature, costs, and scheduling of all section necessary to preclude such discharge.

3. <u>Self-Monitoring Reports</u>

Written reports shall be filed regularly for each calendar month and submitted by the fifteenth day of the following month. The reports shall be comprised of the following:

a. <u>Letter of Transmittal:</u>

A letter transmitting self-monitoring reports should accompany each report. Such a letter shall include

a discussion of requirement violations found during the past month and actions taken or planned for correcting violations, such as plant operation modifications and/or plant facilities expansion. If the discharger has previously submitted a detailed time schedule for correcting requirement violations, a reference to the correspondence transmitting such schedule will be satisfactory. The letter shall contain a statement by the official, under penalty of perjury, that to the best of the signer's knowledge the report is true and correct.

b. <u>Data Results</u>

All results observed or analyzed in II.A., II.B., II.C., II.D., II.E., and II.F.

c. List of Approved Analyses

- Listing of analyses performed by the discharger for which the discharger is approved by the State Department of Health Services.
- 2. List of analyses performed for the discharger by another laboratory currently or previously approved by the State Department of Health Services (and copies of reports signed by the laboratory director of that laboratory shall also be submitted as part of the report).

I, Steven R. Ritchie, Executive Officer, do hereby certify that the foregoing Self-Monitoring Program:

- 1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 90-061
- 2. Is effective on the date shown below.
- 3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the discharger, and revisions will be ordered by the Executive Officer.

STEVEN R. RITCHIE Executive Officer

Effective Date: 5/16/90

